



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6990; Directorate Identifier 2016-NE-14-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Turbomeca S.A. Arriel 1, 1A, 1A1, 1A2, 1B, 1B2, 1C, 1C1, 1C2, 1D, 1D1, 1E, 1E2, 1K1, 1S, and 1S1 turboshaft engines. This proposed AD was prompted by an anomaly that occurred during the grinding operation required by modification TU376, which increases the clearance between the rear curvic coupling of the centrifugal impeller and the fuel injection manifold. This proposed AD would require removing the centrifugal impeller and replacing with a part eligible for installation. We are proposing this AD to prevent failure of the centrifugal impeller, uncontained centrifugal impeller release, damage to the engine, and damage to the helicopter.

DATES: We must receive comments on this NPRM by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6990; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-6990; Directorate Identifier 2016-NE-14-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2016-0090, dated May 10, 2016 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Turbomeca reported an anomaly that was generated during the grinding operation associated to the application of modification TU376, which increases the clearance between the rear curvic coupling of the centrifugal impeller and the fuel injection manifold.

This condition, if not corrected, could lead to crack initiation and propagation in the centrifugal impeller bore area, possibly resulting in centrifugal impeller failure, with consequent damage to, and

reduced control of, the helicopter. To address this potential unsafe condition, the life of the affected centrifugal impellers was reduced and Turbomeca published Mandatory Service Bulletin (MSB) 292 72 0848 to inform operators about the life reduction and to provide instructions for the replacement of the affected centrifugal impellers.

For the reasons described above, this AD requires replacement of each affected centrifugal impeller before it exceeds the applicable reduced life limit.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-6990.

Related Service Information

Turbomeca S.A. has issued Mandatory Service Bulletin (MSB) 292 72 0848, Version B, dated April 13, 2016. The MSB describes procedures for reducing the life limit of the centrifugal impellers affected by an anomaly that occurred during the grinding operation required by modification TU376. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of France, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require removal of the centrifugal impeller from service before exceeding the

reduced life limit shown in Appendix 1 of EASA AD 2016-0090, dated May 10, 2016, and replacement with a part eligible for installation.

Costs of Compliance

We estimate that this proposed AD affects 3 engines installed on helicopters of U.S. registry. We also estimate that it would take about 22 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Required parts cost about \$96,518 per engine. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$295,164.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct

effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Turbomeca S.A.: Docket No. FAA-2016-6990; Directorate Identifier 2016-NE-14-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to certain Arriel 1, 1A, 1A1, 1A2, 1B, 1B2, 1C, 1C1, 1C2, 1D, 1D1, 1E, 1E2, 1K1, 1S, and 1S1 turboshaft engines, with modification TU376 installed.

(d) Reason

This AD was prompted by an anomaly that occurred during the grinding operation required by modification TU376, which increases the clearance between the rear curvic coupling of the centrifugal impeller and the fuel injection manifold. We are issuing this AD to prevent failure of the centrifugal impeller, uncontained centrifugal impeller release, damage to the engine, and damage to the helicopter.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Remove from service, any centrifugal impeller listed in Table 1 to paragraph (e) of this AD, before exceeding the applicable cycles since new (CSN) and replace with a centrifugal impeller not listed in Table 1 to paragraph (e) of this AD.

Table 1 to Paragraph (e) – Centrifugal Impeller CSNs

Part Number	Serial Number	CSN
0292254040	44	5,129
0292254040	1762FT	11,476
0292254050	1676CAR	6,281

Part Number	Serial Number	CSN
0292254050	5333OTT	5,495
0292254050	5017OTT	5,491
0292254050	1136CAR	8,734
0292254050	3655OTT	4,600
0292254050	1757CAR	7,913
0292254050	1738CAR	10,640
0292254050	1149CAR	12,273
0292254050	2677OTT	11,145
0292254050	3109OTT	10,662
0292254050	3496OTT	5,562
0292254050	2074CAR	7,423
729225293A	290CAR	6,326
729225293A	1227FT	8,139
729225293A	504FB	4,600
729225293A	2517OTT	9,732
729225293A	2165OTT	6,163
729225293A	2194FT	11,461
729225293A	1331OTT	12,513
729225293A	1301FT	7,262
729225293A	1567FT	6,305
729225293A	783FB	8,307
729225293A	98OTT	9,492

(2) Reserved.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(g) Related Information

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI, European Aviation Safety Agency AD 2016-0090, dated May 10, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2016-6990.

(3) Turbomeca S.A. Mandatory Service Bulletin (MSB) 292 72 0848, Version B, dated April 13, 2016, can be obtained from Turbomeca S.A., using the contact information in paragraph (g)(4) of this proposed AD.

(4) For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on July 21, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2016-17719 Filed: 7/27/2016 8:45 am; Publication Date: 7/28/2016]